

CLAIMS

What is claimed is:

1. A method for processing medical information comprising the steps of:
gathering longitudinal medical information of a patient; and
aggregating and anonymizing the longitudinal medical information into selected categories incident to a particular disease.
2. The method for processing medical information according to claim 1, further comprising the step of gathering longitudinal medical information from a relative of the patient.
3. The method for processing medical information according to claim 2, further comprising the step of generating information in the group consisting of disease susceptibility, severity, and progression.
4. The method for processing medical information according to claim 3, further comprising the step of generating information in the group consisting of quality of life, workforce participation, productivity and morbidity.
5. The method for processing medical information according to claim 4, further comprising the step of identifying genes that may predispose people to cancer whose pathways of action are associated with documented and previously unknown environmental carcinogens and lifestyle exposures.

6. The method for processing medical information according to claim 5, further comprising the step of quantifying risk resulting from environmental carcinogens and lifestyle exposures.

7. The method for processing medical information according to claim 6, further comprising the step of integrating information on disease susceptibility and environmental carcinogens and lifestyle exposures in order to estimate cancer risks for individuals, families and populations.

8. A method for processing medical information of a patient comprising the steps of:
gathering medical information of at least one patient in order to determine phenotype information; and
communicating the medical information in an aggregated and anonymized format to at least one hospital.

9. The method for processing medical information according to claim 8, further comprising the step of gathering medical information from at least one relative of the patient.

10. The method for processing medical information according to claim 9, further comprising the step of generating information in the group consisting of disease susceptibility, severity, and progression.

11. The method for processing medical information according to claim 10, further comprising the step of generating information in the group consisting of quality of life, workforce participation, productivity and morbidity.

12. The method for processing medical information according to claim 11, further comprising the step of identifying genes that may predispose people to cancer whose pathways of action are associated with documented and previously unknown environmental carcinogens and lifestyle exposures.

13. The method for processing medical information according to claim 12, further comprising the step of quantifying risk resulting from environmental carcinogens and lifestyle exposures.

14. The method for processing medical information according to claim 13, further comprising the step of integrating information on disease susceptibility and environmental carcinogens and lifestyle exposures in order to estimate cancer risks for individuals, families and populations.

15. A method for correlating longitudinal medical information of a patient afflicted with disease comprising the steps of:

gathering longitudinal medical information of the patient afflicted with disease and from relatives of the patient from at least one hospital where such longitudinal medical information is collected;

determining phenotype information from the gathered longitudinal medical information; and

communicating the longitudinal medical information aggregated and anonymized to at least one hospital.

16. The method for correlating medical information according to claim 15, further comprising the step of generating information in the group consisting of disease susceptibility, severity, and progression.
17. The method for correlating medical information according to claim 16, further comprising the step of generating information in the group consisting of quality of life, workforce participation, productivity and morbidity.
18. The method for correlating medical information according to claim 17, further comprising the step of identifying genes that may predispose people to cancer whose pathways of action are associated with documented and previously unknown environmental carcinogens and lifestyle exposures.
19. The method for correlating medical information according to claim 18, further comprising the step of quantifying risk resulting from environmental carcinogens and lifestyle exposures.
20. The method for correlating medical information according to claim 19, further comprising the step of integrating information on disease susceptibility and environmental carcinogens and lifestyle exposures in order to estimate cancer risks for individuals, families and populations.

21. A method for correlating longitudinal medical information of at least one patient afflicted with disease comprising the steps of:

gathering longitudinal medical information from each one of at least one patient afflicted with disease and from a relative of each one of the at least one patient from at least one hospital where such longitudinal medical information is collected to determine phenotype information;

anonymizing the longitudinal information;

storing the longitudinal information on a database accessible to at least one hospital; and

communicating the longitudinal information aggregated and anonymized to at least one hospital.

22. A method for processing longitudinal medical information of at least one patient afflicted with disease comprising the steps of:

collecting the longitudinal medical information from each patient as each one of the at least one patient progresses through a diagnostic, a treatment and a follow-up stage of the disease;

anonymizing the longitudinal medical information; and

storing the longitudinal information on a database accessible by at third party user.

23. A method for processing longitudinal medical information of at least one patient afflicted with disease comprising the steps of:

gathering longitudinal medical information from at least one hospital where such longitudinal medical information is collected and managed;

aggregating the longitudinal medical information;

anonymizing the longitudinal information;

determining phenotypic information from the longitudinal medical information; and

storing both the longitudinal information and the phenotypic information in at least one database accessible by a third party user.

24. A method comprising the steps of:

gathering longitudinal medical information from at least one patient afflicted with disease and from relatives of each one of the at least one patient from at least one hospital where such longitudinal medical information is collected; and

communicating the longitudinal information in an aggregated and anonymized format to at least one hospital.

25. A method for determining phenotype information comprising the steps of:

gathering longitudinal medical information of at least one patient from at least one hospital where such longitudinal medical information is collected;

aggregating the longitudinal medical information;

anonymizing the longitudinal medical information;

comparing the longitudinal medical information gathered from each one of the at least one patient with pre-determined genetic data ascertained from both each one of the at least one patient and at least one relative of each one of the at least one patient;

determining a phenotypic expression of the comparison; and

storing the longitudinal medical information and the phenotypic expression in a database accessible by a third party user.

26. The method for determining phenotype information according to claim 25, further comprising the step of gathering medical information from at least one relative of the patient.
27. The method for determining phenotype information according to claim 26, further comprising the step of generating information in the group consisting of disease susceptibility, severity, and progression.
28. The method for determining phenotype information according to claim 27, further comprising the step of generating information in the group consisting of quality of life, workforce participation, productivity and morbidity.
29. The method for determining phenotype information according to claim 28, further comprising the step of identifying genes that may predispose people to cancer whose pathways of action are associated with documented and previously unknown environmental carcinogens and lifestyle exposures.

30. The method for determining phenotype information according to claim 29, further comprising the step of quantifying risk resulting from environmental carcinogens and lifestyle exposures.

31. The method for determining phenotype information according to claim 30, further comprising the step of integrating information on disease susceptibility and environmental carcinogens and lifestyle exposures in order to estimate cancer risks for individuals, families and populations.

32. A method for determining a correlation between genetic predispositions and phenotype information in order to successfully treat disease, the method comprising the steps of:

correlating longitudinal medical information gathered from at least one hospital where such longitudinal medical information is collected where the longitudinal information being collected from at least one patient having a disease and at least one relative of each one of the at least one patient;

aggregating the longitudinal medical information;

anonymizing the longitudinal medical information; and

storing the longitudinal information in a database accessible by at least one user.

33. The method for correlating longitudinal medical information according to claim 32, further comprising the step of communicating the longitudinal medical information to at least one hospital.

34. A method for correlating longitudinal medical information of a patient

comprising the steps of:

gathering longitudinal medical information to determine phenotype information from at

least one hospital where such longitudinal medical information is managed;

aggregating the longitudinal medical information;

anonymizing the longitudinal medical information; and

storing the longitudinal information in a database accessible by at least one hospital.

35. A method for doing business, the method comprising the steps of:

providing computer hardware to a medical institution at less than market price, in return

for access to patient data generated at the medical institution.

36. The method according to claim 35, further comprising the step of selling the

patient data available in an anonymized form to customers outside the medical institution.

37. A method comprising the steps of:

aggregating patient data drawn from multiple incompatible databases into a single

database in an anonymized form, and providing access to the single database to a user.

38. A system for managing clinical information comprising:

a first database for storing patient data;

a computer interconnected to the first database, the computer programmed to anonymize
and aggregate the patient data; and

a second database, interconnected to the computer, the second database for storing the anonymized and aggregated the patient data

39. The system according to claim 38, wherein the first database includes information in the group consisting of genetic profile, disease susceptibility, severity, and progression.
40. The system according to claim 39, wherein the second database includes information in the group consisting of quality of life, workforce participation, productivity and morbidity.
41. The system according to claim 40, wherein the computer is programmed to identifying genes that may predispose people to cancer whose pathways of action are associated with documented and previously unknown environmental carcinogens and lifestyle exposures.
42. The system according to claim 40, wherein the computer is programmed to determine a phenotypic expression of the patient data.
43. A system for determining a phenotypic expression of a patient having a genetic predisposition for disease, the system comprising:
 - at least one hospital having a first database for storing local disease outcomes information;
 - a vendor having a second database, where the second database is interconnected to the first database, the second database for storing patient data collected from the at least one hospital; and

a computer programmed to anonymize and aggregate the patient data, where the second database is accessible by third party users.